

ARTICLE V. BASIC BUILDING CODE**DIVISION 1. GENERALLY****Sec. 5-66. Purpose.**

The purpose and intent of this article is to govern the design, construction, alteration, repair addition, removal, demolition, use, location, occupancy and maintenance of all buildings and structures and their service equipment as herein defined, except as some of such matters may be described in public, local or general laws of the State, zoning and other ordinances or regulations having legal precedence.

Sec. 5-67. Scope.

The provisions of this article shall apply to the construction of new buildings and structures. Construction involving buildings and structures existing at the time of adoption of or amendment of this Article shall comply with this Article or Article XIII. Applicable buildings must also comply with the provisions of Article XIV.

Sec. 5-68. Definitions.

Words defined in this article are intended only for use with sections of this article or any document referred to in this article. The following definitions are intended to be read in place of any definitions of the same words contained in the publication adopted in section 5-86.

Accessory structure means a building subordinate to, and located on the same lot with a main building, the use of which is clearly incidental to that of the main building, or to the use of the land, and which is not attached by any part of a common wall or common roof to the main building.

Accessory use means a use of a building, lot or portion thereof, which is customarily incidental and subordinate to the principal use of the main building or lot.

Alley means a passage or way open to public travel generally affording a secondary means of vehicular access to abutting lots and not intended for general traffic circulation.

Alteration, when applied to a building or structure or its service equipment, means:

- (1) A change or rearrangement in the structural parts or in the exit facilities;
- (2) A vital change in the service equipment;
- (3) An enlargement whether by extending laterally or by increasing in height;
- (4) The moving from one (1) location or position to another; or
- (5) The change in occupancy from one (1) use group to another of different legal requirements.

Building means a structure having one (1) or more stories and a roof, designed primarily for the shelter, support, or enclosure of persons, animals, or property of any kind.

Building Code Official means the Chief of Inspection Services.

Building line means a line coincident with the foundation wall of any enclosed porch, vestibule or other enclosed portion of a building, except as provided in chapter 25 (zoning).

Code Official means the Chief of Inspection Services.

Cool Roof Rating Council means an independent, non-profit organization that maintains the third-party rating system for radiative properties of roof surfacing materials.

Demolition means the complete razing of a building or structure.

Demolition by Neglect of Historic Properties means failure to maintain property, or any component thereof, located within a designated Historic District Zone so as to jeopardize the historic integrity of the property.

Dwelling, single unit means a building containing not more than one (1) dwelling unit. A one-family dwelling may include an accessory apartment approved by special exception.

Dwelling, semi-detached means a building containing not more than two (2) dwelling units arranged one above the other or side-by-side.

Dwelling, multifamily / multiunit, apartment house means a building containing three (3) or more dwelling units (an apartment house).

Dwelling, townhouse means one (1) of a group of three (3) or more dwelling units separated from each other by a party wall without openings extending from the cellar floor to the highest point of the roof, along the dividing lot line, and having separate front and rear or front and side entrances from the outside.

Dwelling unit means a building or portion thereof arranged or designed for permanent occupancy by not more than one (1) family for living purposes and having cooking facilities.

Energy Star means the joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy designed to identify and promote energy-efficient products and practices.

Fire Code Official means the Chief of Inspection Services.

Garage, group means an accessory building or portion of a main building designed, arranged, or used for the housing of private motor vehicles, only one (1) of which may be a commercial vehicle. Not more than fifty (50) percent of the space in such a garage shall be used for housing vehicles other than those owned by occupants of the premises; except that all of the space in a garage of one (1) or two (2) car capacity may be so rented.

Garage, service-repair means a building, lot or both in or upon which the business of general motor vehicle repair and service is conducted, but excluding junk and/or auto wrecking business.

Garage, storage means a lot or portion thereof, other than an automobile sales lot, held out or used for the storage or parking of six (6) or more motor vehicles for a consideration, where service or repair facilities are not permitted. Such parking lot shall not be considered an accessory use, nor shall it be used for the storage of dismantled or wrecked motor vehicles, parts thereof or junk.

Hotel (including motel) means any building containing rooms or suites of rooms designed and intended for the temporary lodging of guests, and which are available to the general public for compensation.

Lot means a parcel of land occupied or to be occupied by a building and its accessory buildings or by group buildings and their accessory buildings, together with such open spaces as are required under the provisions of Chapter 25 (zoning), having at least the minimum area required by Chapter 25 (zoning) for a lot in the zone in which such lot is situated and having its principal frontage on a public street or public way.

Lot, corner means a lot abutting on two (2) or more streets at their intersections, where the interior angle of the intersection does not exceed one hundred thirty-five (135) degrees.

Lot, interior means any lot other than a corner lot, not including a through lot.

Lot line, front means the street line running along the front of the lot and separating it from the street. In a through lot, both lines abutting the street shall be deemed to be the front lot lines.

Lot line, rear means the lot line generally opposite or parallel to the front lot line, except in a through lot. If the rear lot line is less than ten (10) feet long or the lot comes to a point at the rear, the rear lot line is assumed to be a line not less than ten (10) feet long, lying wholly within the lot, parallel to the front lot line or, in the case of a curved front lot line, parallel to the chord of the arc of the front lot line.

Lot line, side means any lot line connecting the front and rear lot lines.

Lot, through means an interior lot fronting on two (2) or more streets that do not intersect adjacent to the lot.

Municipality means the Mayor and Council of Rockville.

Onsite renewable energy system includes, but is not limited to, photovoltaic panels, solar thermal collectors and wind systems located on or directly adjacent to the building site.

Record lot means the land designated as a separate and distinct parcel of land on a legally recorded subdivision plat filed among the land records of the County, but does not include land identified on any such plat as an out lot or an ownership lot shown on an ownership plat.

Setback means the minimum perpendicular distance required between a lot line and any building or structure constructed or which may be constructed thereon, consistent with the setback requirements of the zone in which such lot is located.

Skylight means any window, cover or enclosure, or any combination of them, placed in a roof opening for the admission of light and/or ventilation.

Story means that portion of a building included between the surface of any floor and the surface of the floor next above it or, if there is no floor above it, the space between such floor and the ceiling next above it. A basement shall be counted as a story, if it is used for business or dwelling purposes. A mezzanine floor shall be counted as a story if it covers over one-third of the area of the floor next below it or if the vertical distance between the floor next below it and the floor next above it is twenty (20) feet or more.

Story, half means a story under a gable, hip or gambrel roof, the wall plates of which on at least two (2) opposite exterior walls are not more than two (2) feet above the floor of such story.

Street means a public dedicated way which affords the principal means of access to abutting property, including street, avenue, place, drive, boulevard, highway, road, pike, cul-de-sac, court, and any other public way except an alley or driveway.

Street lot line means a line defining the edge of a street right-of-way and separating the street from the abutting property or lots. If, on a master plan of streets and highways duly adopted by the Planning Commission, a street is scheduled for future widening, the proposed right-of-way line shown on the master plan shall be the street line.

Structure means a combination of materials which requires permanent location on the ground or attachment to something having permanent location on the ground.

Structure, part thereof means a combination of materials forming a construction for occupancy or other purposes which requires permanent location on the ground or attached to something having permanent location on the ground.

Vegetated roof means a layer of vegetation growing in a medium on top of a drainage layer and a synthetic, waterproof membrane on the roof of a structure.

Volume of building means the actual cubical space occupied by the building, including exterior walls, basements, cellars and penthouses, but not open balconies, open porches or platforms.

Written notice, when required under the provisions of this article, means a written notice shall be considered to have been served, if delivered in person to the owner, agent or occupant of the structure to which the order or notice relates or other person responsible for the condition of violation. Service shall be made either by personal service; by delivering the same to the subject premises or the office or usual place of abode of the person being served and leaving it with some person of suitable age and responsibility who shall be informed of the contents thereof; by mailing a copy thereof to such person by certified mail to the last known address with return receipt requested; or if the certified mail is returned without receipt or with receipt showing that it has not been delivered, by posting a copy of the order or notice in a conspicuous place in or about the structure affected by such order or notice. If service cannot be made by any of the foregoing methods, service may be made by publishing the substance of the order or notice in a newspaper of general circulation in the County.

Yard means the undeveloped space created by the setback requirements, lying between the lot lines and any structure or building, and not occupied nor obstructed from the ground upward, except as provided in this Chapter.

Yard, front means the open space extending across the full width of a lot between the front lot line of the proposed front street line and nearest line of the building or any enclosed portion thereof. The depth of such yard shall be the shortest horizontal distance between front lot line or proposed front street line and the nearest point of the building or any enclosed portion thereof.

Yard, rear means the open space extending across the full width of a lot between the rear line of the lot and the nearest line of the building, porch or projection thereof. The depth of such yard is the shortest horizontal distance between the rear lot line and the nearest point of the building. When the rear lot line is less than ten (10) feet long or if the lot comes to a point at the rear, the depth of the rear yard is measured to an assumed rear lot line, as defined under "lot line, rear."

Yard, side means open space between side lot line, the side street line, or the proposed side street line, if such line falls within the lot, and the nearest line of the building, porch, or projection thereof, extending from the front yard to the rear yard, or, in the absence of either of such yards, to the front lot line or rear lot line. The width of a side yard shall be the shortest distance between the side lot line and the nearest point of the building, porch or projection thereof.

Secs. 5-69 – 5-75. Reserved.

DIVISION 2. ADMINISTRATION AND ENFORCEMENT

Sec. 5-76. Enforcement; violations.

(a) Any person who shall violate any of the provisions of this article; or shall fail to comply herewith or shall permit or maintain such a violation; or shall violate or fail to comply with any order made hereunder; or shall build in violation of any details, statements, specifications or plans submitted or approved hereunder; or shall operate not in accordance with the provisions of any certificate, permit, or approval issued hereunder; or who shall fail to comply with such an order as affirmed or modified by the Board of Adjustments and Appeals within the time fixed therein, shall severally for each violation and noncompliance respectively, be guilty of a municipal infraction. The imposition of penalty for any violation shall not excuse the violation nor shall the violation be permitted to continue. Prosecution or lack thereof of either the owner, occupant, or the person in charge shall not be deemed to relieve any of the others.

(b) Any order or notice issued or served as provided in this article shall be complied with by the owner, operator, occupant or other person responsible for the condition or violation to which the order or notice pertains. Every order or notice shall set forth a time limit for compliance dependent upon the hazard and danger created by the violation. In cases of extreme danger to persons or property immediate compliance shall be required. If the building or other premises is owned by one (1) person and occupied by another, under lease or otherwise, and the order or notice requires additions or changes in the building or premises such as would immediately become real estate and be the property of the owner of the building or premises, such order or notice shall be complied with by the owner unless the owner and occupant have otherwise agreed between themselves, in which event the occupant shall comply.

Secs. 5-77 – 5-85. Reserved.

DIVISION 3. TECHNICAL STANDARDS

Sec. 5-86. International Building Code--Adopted.

The International Code Council (ICC) International Building Code, 2009 Edition, as modified herein, is hereby adopted as the building code for the City. One (1) copy of such publication as adopted shall be maintained by the City Clerk in the office of the Council and made available for inspection by the public during regular office hours. Any amendment or change in such publication promulgated by the International Code Council shall not become a part of this article until adopted by ordinance. References to other ordinances and codes of the City shall be interpreted and applied in accordance with the terms and effect of such ordinances and codes at the time of such application and interpretation.

Sec. 5-87. Same--Amendments.

The *ICC International Building Code*, 2009 Edition (IBC), is amended in the following respects:

Section 101.1 of the IBC is amended to read as follows:

101.1 Title. These regulations shall be known as the *Building Code of the City of Rockville*, hereinafter referred to as "this code".

Section 101.3.1 is added to the IBC to read as follows:

101.3.1 Application of references. References to the International Building Code shall mean the 2009 Edition of the International Building Code issued by the International Code Council Inc. Unless otherwise specified, all references to an article, section number, table, chart, etc., or to provisions not specifically identified by number and not set forth textually in this article but included by reference only, shall be construed to refer to such article, section number, table, chart, or provision as specified in the "International Building Code", which article, section or provision is hereby made part of this article and shall have the same force and effect as if set forth in this article in full.

The citing of the main number of an article or section of the International Building Code shall be taken to include all of its sections or subsections. Subject to changes by the council, the other standards and specifications, or recommended regulations, or parts thereof, which are included by reference to their title and date in various parts of the "International Building Code" and sometimes identified as an "appendix" thereof, are declared to be a part of this article to the full extent of the provisions of such "appendix" or "appendices"; provided, that in the case of conflict the provisions of this article shall govern.

Amendments to the International Building Codes may be promulgated from time to time by the International Code Council, shall be adopted pursuant to laws as are other ordinances or amendments thereto. Changes in the regulations or standards and specifications promulgated by the accredited authoritative agencies of the International Code Council shall be adopted as regulations, standards, and specifications of the City after being approved by ordinance of the council.

Section 101.4.7 is added to the IBC to read as follows:

101.4.7. Electrical. The provisions of the 2008 National Electrical Code as published by the National Fire Protection Association and the City amendments to this code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

Section 105.5 of the IBC is amended to read as follows:

105.5. Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within six (6) months after its issuance, or if the work authorized by such permit does not continue to progress or is abandoned for a period of six (6) months after the last approved/valid inspection. Before such work recommences, a new permit shall be first obtained and the appropriate fees shall be paid. The code official can extend the time for action by the permittee if there is reasonable cause. A permittee holding an unexpired permit shall have the right to apply for an

extension, in writing, for time to complete such work. The extension shall be requested for a justifiable cause. A permit shall not be extended more than once.

The fees shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work. Any person who commences work before obtaining the necessary permits shall be subject to, an investigation fee as set forth by resolution, and 100 percent of the usual permit fee.

Section 105.6 of the IBC is amended to read as follows:

105.6 Suspension or Revocation of permits. Any permit or certificate issued under this article may be suspended or revoked when it is determined by the Chief of the Division of Inspection Services that:

- (1) It is used by a person other than the person to whom the permit or certificate was issued;
- (2) It is used for a location other than that for which it was issued;
- (3) Any of the conditions or limitations set forth in the permit or certificate has been violated;
- (4) The permittee fails, refuses or neglects to comply with any order or notice duly served upon the permittee under the provisions of this article within the time provided therein;
- (5) There has been any false statement or misrepresentation as to a material fact in the application or plans on which the permit or application was based.

Revocation shall be in writing and shall state the reason for the revocation.

Section 107.2 of the IBC is amended to read as follows:

107.2 Construction Documents. Construction documents shall be in accordance with Sections 107.2.1 through 107.2.7

Section 107.2.1.1 of the IBC is amended to read as follows:

107.2.1.1 Building Height and Area Calculations. On the Code Data Sheet for a new structure or an addition to an existing structure, the design professional shall provide the height and area calculations used to determine if the structure meets the limitations of the building code.

Section 107.2.6 of the IBC is added to read as follows:

107.2.6 Fire Protection Engineering Design Evaluation (FPEDE). All plans and specifications for which a building permit is required for buildings of the Use Groups

listed in Section 107.2.7 shall be evaluated in accordance with the requirements of this Section for design compliance with adopted fire related code requirements concerning:

- (1) Documentation of the title and edition of all applicable State and local Building and Fire codes and standards, and amendments thereto, on which the design is based;
- (2) Designated Use Group Classification(s) of all spaces;
- (3) Type of Construction requirements identified, with supportive calculations;
- (4) Documentation of fire endurance ratings of structural elements and fire rated components (walls, floors, roofs, parapets, opening protectives);
- (5) Detailed discussion for protection of fire rated penetrations, systems joining fire rated assemblies, perimeter fire containment, etc.;
- (6) Height and area limits compliance and required property line setback criteria;
- (7) Occupant load calculations, egress capacity and travel distance analysis;
- (8) Interior finishes analysis;
- (9) Fire protection systems required (suppression, fire alarm, smoke detection, heat detection, smoke control, other required fire protection systems);
- (10) Fire hydrant locations, fire department connection locations, and emergency fire and medical vehicle access;
- (11) Emergency lighting and emergency power systems;
- (12) Applicable provisions of Chapter 4 of the IBC, "Special Detailed Requirements Based on Use and Occupancy";
- (13) Compliance with applicable NFPA Codes and Standards for specific processes, materials, or hazards which are referenced within the IBC, NFPA 101, Life Safety Code or NFPA 1, Uniform Fire Prevention Code;
- (14) Integration, coordination and performance of fire protection systems (both active and passive) with detailed information of their features;
- (15) Completion of the 2009 International Building Code Plan Review Record as published by the International Code Council.

A written Fire Protection Engineering Design Evaluation (FPEDE) concerning these items shall be submitted with the plans accompanying the application for a building permit. It shall be in a format established by the Fire Marshal and shall be signed and ~~sealed~~ stamped by the preparer. If, in the course of performing the FPEDE, the evaluating fire protection engineer determines that there are fire

related code deficiencies in the drawing or specifications, all such deficiencies shall be remedied prior to the submittal of the FPEDE and the building permit application and drawings. The FPEDE must include a signed and sealed statement by both the evaluating fire protection engineer and the engineer or architect of record attesting: "In my professional engineering opinion these~~These~~ drawings ~~drawings~~ and specifications are in full-compliance with the fire safety provisions of all adopted State and local Building Code, Fire Codes, Mechanical Codes, local amendments and referenced codes and standards to the best of their knowledge and belief".

107.2.6.1 Shop Drawings. All fire protection shop drawings prepared by sub-contractors shall be reviewed, signed and ~~sealed-stamped~~ by the fire protection engineer who performed the FPEDE prior to submittal to the City of Rockville. Shop drawings include, but not limited to, fire sprinkler plans, non-aqueous fire protection systems, fire alarm submittals, smoke control systems, ~~etc.~~ The fire protection engineer shall review the plans for coordination of components and the performance of integrated systems. The fire protection engineer will also verify that the systems are designed in accordance with the appropriate standard, all fire protection systems are coordinated together to work in concert, and that all information is presented for a review.

The fire protection shop drawings must have a signed and ~~sealed-stamped~~ statement attached to the plans by the evaluating fire protection engineer attesting: "In my professional engineering opinion t~~These~~ drawings and specifications have been reviewed, coordinated with other applicable fire protection systems, and are in full-compliance with the fire safety provisions of all adopted State and local Building Code, Fire Codes, Mechanical Codes, local amendments and referenced codes and standards to the best of their knowledge and belief.

107.2.6.2 FPEDE Finals. Prior to final inspection by city officials, the fire protection engineer shall personally inspect and verify that the systems are installed correctly and are prepared for an inspection. The fire protection engineer shall be present for the inspection by city officials.

Section 107.2.7 of the IBC is added to read as follows:

107.2.7 Use Groups Requiring a Fire Protection Engineering Design Evaluation (FPEDE). An FPEDE is required for the following buildings or fire protection systems for which a building permit application is made:

- (1) Use Group "A", Assembly, with an occupant load of One Thousand (1,000) persons or more;
- (2) Use Group "E", Educational;
- (3) Use Group "H", High Hazard;
- (4) Use Groups "I-2 and I-3", Institutional;
- (5) Use Group "M", all malls of Type one (1) construction;

- (6) All Use Groups with an estimated construction cost of Five Million Dollars (\$5,000,000.00) or more;

107.2.7.1 Qualifications of Fire Protection Design Evaluation (FPEDE) Preparer.

The FPEDE must be prepared by a Fire Protection Engineer who is a registered Professional Engineer in the State of Maryland. The preparer must also possess a Bachelor of Science in Fire Protection Engineering from a Accreditation Board for Engineering and Technology (ABET) accredited University.

Section 107.3.3 of the IBC is amended to read as follows:

107.3.3 Phased approval. The Chief of Inspection Services is authorized to issue a permit for the construction of foundations of a building or structure provided the application for foundation permit includes all relative information, number of plans, applications, complies with the appropriate codes and fees. The holder of such permit for the foundation of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

Section 109.6 of the IBC is deleted.

Sections 111.1.1, 111.1.2, and 111.1.3 are added to the IBC to read as follows:

111.1.1 New buildings. A building or structure hereafter erected shall not be used or occupied in whole or in part until the certificate of occupancy shall have been issued by the code official.

111.1.2 Buildings hereafter altered. A building or structure hereafter enlarged, extended or altered to change from one (1) use group to another or to a different use within the same use group in whole or in part, and a building or structure hereafter altered for which a certificate of occupancy has not been heretofore issued, shall not be occupied or used until the certificate shall have been issued by the code official, certifying that the work has been completed in accordance with the provisions of the approved permit. Any use or occupancy, which was not discontinued during the work of alteration, shall be discontinued within thirty (30) days after the completion of the alteration unless the required certificate is secured from the code official.

111.1.3 Change of tenant or ownership. Whenever a commercial, industrial, or business use or building changes ownership; or the tenancy of a commercial or industrial building or space changes, application must be made for a certificate of occupancy. Any violations of this Section or any applicable code as determined by the Code Official must be corrected prior to the issuance of the certificate of occupancy.

Section 115.2.1 is added to the IBC to read as follows:

115.2.1 Notice to owner. Upon notice from the code official that work on any structure or building is being performed contrary to the provisions of this code or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order may be verbal or in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work.

Section 115.3 of the IBC is amended to read as follows:

115.3 Unlawful Continuance. Any person who shall continue any work in or about the structure after having been issued a verbal or written stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine as set forth by resolution of the Mayor and Council.

Section 414.1.2.2 is added to the IBC to read as follows:

414.1.2.2 Laboratory ~~liquids~~chemicals. Upon application for construction permit, any structure with a laboratory shall provide a listing of liquids to be stored and used. The applicant is responsible for the preparation and submittal of the chemical list, the quantity to be stored of each individual chemical, the Material Safety Data Sheets and the container storage type and arrangement for review.

Section 701.2 A definition is added to the IBC section to read as follows:

Fire Rated Wall Identification. All walls that are rated for fire resistance or smoke barriers shall be marked at the highest point of the wall with six inch tall red, stencil paint letters, with a minimum of 3/4" stroke width, stating the type of wall it serves as according to the International Building Code and "Protect all Penetrations". Such identification shall be above any decorative ceiling and in concealed spaces. If a wall transverses multiple floors, then the wall shall be marked at each level. The signage shall be repeated every 20 linear feet.

Section 711.6.1 is added to the IBC to read as follows:

711.6.1 Sealing Penetrations in Smoke Partition Construction. The manner to properly seal penetrations in a smoke partition wall is to fill the void opening around the item penetrating the wall with a noncombustible material such as Mineral Wool or another acceptable fill-void material. The fill void material shall have a coating of sealant applied and smoothened to close any gaps. The sealant can be non-combustible or have a Class A flame spread combustibility rating.

Section 903.1.2 is added to the IBC to read as follows:

903.1.2 Sprinkler Zones. Each floor shall be zoned separately. ~~Where the building is equipped with a fire alarm system in accordance with Section 907, the area of the~~

~~sprinkler zone shall coincide with the allowable area of the fire alarm system. Atriums shall be separately zoned to work in concert with the fire alarm zone to activate the exhaust fans.~~

Exceptions:

- (1) Where the building is not protected throughout by a fire alarm system in accordance with Section 907, a zone shall not exceed 52,000 square feet (2,090 m²) for light hazard occupancies and 40,000 square feet for ordinary and extra hazard occupancies.
- (2) Single unit dwellings designed in accordance with NFPA 13D.

Section 903.3.1.4 of the IBC is added to read as follows:

903.3.1.4 Manner for Calculation of Residential Bathroom Square Footage. When calculating the area of a residential bathroom for the purpose of determining if sprinkler coverage is ~~warranted~~required, any separate rooms with doors opening into the larger room contained within the larger footprint shall be counted. The area that a shower stall or bathtub uses shall also be incorporated into the overall area calculation. Rules governing smaller rooms shall continue to apply when determining if those smaller rooms need independent sprinkler heads.

Section 903.6 is added to the IBC to read as follows:

903.6 Fire Pump Room Design. Any room housing a fire pump shall be a minimum of 100 square feet in area with the smallest wall dimension of no less than 8 feet. Additional area will be required when more than the backflow preventer, fire pump and pump controller as proposed to be installed in the room.

903.6.1 Fire Pump Room Doorway. The room shall have a doorway directly to the exterior. The doorway shall encompass a double door with each door leaf measuring a minimum of 36 inches in width.

Exception: Fire Pump rooms located below grade with direct access from a fire department and maintenance accessible area are exempt from the doorway directly to the exterior.

903.6.2 Fire Pump Room Protection. If bollards or other vehicular protective devices are installed outside of the doors, the protective devices shall be located a minimum of 6 feet away from the door opening.

903.6.3 Fire Pump Room Drains. Each fire pump room shall be provided with a minimum of two drains located near the fire pump. Each drain shall have a minimum of 4 inch diameter opening. One drain shall be dedicated to the main drain from the pump discharge piping and the second drain opening shall serve the accessory drain piping from the fire pump.

Section 903.7 is added to the IBC to read as follows:

903.7 Sprinkler Plan Preservation. All buildings equipped with a new sprinkler system shall have a copy of the plans permanently mounted in the Fire Command Center or Fire Pump room or main sprinkler valve room. The plans shall be protected from deformation and located in a dedicated, labeled storage cabinet permanently mounted to the wall adjacent to the main sprinkler riser and locked. Plans can be reduced in size but must remain legible. Plans for tenant modifications do not need to meet this requirement.

Section 903.8 is added to the IBC to read as follows:

903.8 Insulation Value for Sprinkler Piping Protection. All insulation installed near or on sprinkler piping shall have a minimum R-value of 30. R-30 insulation shall be used in the attic and in the exterior walls. Only batt insulation shall be used in the specific areas protecting sprinkler piping. Blown-in insulation shall not be used in the same channels as sprinkler piping. Appropriate width shall be provided to prevent the compaction of the insulation, thus decreasing the "R" value of the insulation.

Section 907.2.13.2 of the IBC is amended to read as follows:

907.2.13.2 Fire department communication system. An approved two-way, fire department communication system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with Section 911, elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication devices shall be provided on intermediate floor landings in stairwells and adjacent to fire department hose connections, unless otherwise permitted by the code official.

Sections 907.6.3.3 and 907.6.3.4 are added to the IBC to read as follows:

907.6.3.3 Fire Alarm Zones. Each floor shall be zoned separately. Where the building is protected by an automatic sprinkler system in accordance with Section 903, the area of the fire alarm zone shall coincide with the allowable area of the sprinkler system.

907.6.3.4 Fire Alarm Zones Unprotected areas. Where the building is not protected throughout by an automatic sprinkler system in accordance with Section 903, a zone shall not exceed 22,500 square feet (2090 m²) and the length of any zone shall not exceed 300 feet (91440 mm) in any direction.

Section 909.2.1 is added to the IBC to read as follows:

909.2.1 Smoke Control Systems Design Report. All active mechanical smoke control systems shall be reviewed, signed and stamped by a Professional Engineer meeting the requirements of Section 107.2.7.1 prior to submission for review. The Professional

Engineer shall submit a Design Report with supportive calculations to the Fire Marshal attesting to the design's compliance with Sections 909.8 and 909.9 of this Code, as well as applicable adopted NFPA Codes for smoke control systems.

Section 915.1 of the IBC is amended to read as follows:

915.1 General. Emergency responder radio coverage shall be provided in all new buildings in accordance with Sections 3111.

Section 916 is added to the IBC to read as follows:

Section 916

Fire Hydrant

~~*Sections 916.1, 916.2, 916.3 and 916.4*~~ are added to the IBC to read as follows:

916.1 Fire Hydrant Spacing. For all newly constructed buildings, fire hydrants shall be spaced at no greater than 300 feet from all points of the structure as the fire hose would lay on the ground. The perimeter distance shall be measured, as a hose line would be laid along paved streets, through parking lot entrances, and around obstructions, in accordance with the determination of the authority having jurisdiction. If publicly maintained hydrants do not meet this spacing, then privately owned and maintained hydrants shall be provided.

Exception: Fire hydrant perimeter spacing may be increased to 500 feet for a structure equipped with an automatic fire suppression installed completely throughout. The distance from a fire hydrant to the fire department connection shall remain 100 feet.

916.1.1 Fire Hydrant location. Structures equipped with a sprinkler system and/or a standpipe system shall have a fire hydrant located within 100 feet of the fire department connection. The distance shall be measured along a path accessible to foot travel.

~~**Exception:** Fire hydrant perimeter spacing may be increased to 500 feet for a structure equipped with an automatic fire suppression installed completely throughout. The distance from a fire hydrant to the fire department connection shall remain 100 feet.~~

916.2 Fire Hydrant Location Markings. All new and relocated fire hydrants, either maintained by the City of Rockville, Washington Suburban Sanitary Commission or privately owned, shall be provided with a marker installed in the roadway. The marker shall be reflective and blue in color. The location of the marker shall be dependant upon the roadway characteristics.

- On unstriped roadways, blue markers shall be set in the center of the roadway.
- On undivided striped roadways, blue markers shall be set 6" to the hydrant side of the center stripe.

- On divided roadways, the blue marker shall be set 6" to the side of the lane striping, which is closest to the hydrant.
- In locations where hydrants are situated on corners, blue markers shall be installed on both approaches, which front the hydrant.

In addition, all fire hydrants shall be equipped with a vertical visual indicator to be permanently attached to the bonnet of the fire hydrant to assist in locating the hydrant when surrounded by snow.

916.3 Fire Hydrant Color Coding. A reflective tape marker shall be placed on each fire hydrant indicative of the fire hydrant's flow characteristics. The color of the band of reflective tape shall be in accordance with NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants. The band shall be at least 2 inches in width and shall be wrapped around the neck of the fire hydrant, which is immediately beneath the bonnet.

Exception: If the fire hydrant is manufactured where a band cannot be attached, a reflective self adhesive tape shall be applied to the rim of the bonnet.

916.4 Fire Hydrant Protection Systems. When a fire hydrant is considered to be vulnerable to vehicular traffic by the Code Official, a protective system shall be installed to prevent any damage. The system can be composed of bollards or another accepted physical barriers capable of impact without causing damage to the fire hydrant.

Section 1007.1 of the IBC is amended to read as follows:

1007.1 General. All spaces required to be accessible by the Maryland Accessibility Code shall be provided with not less than one (1) accessible means of egress that complies with this section. Where more than one (1) means of egress is required from any required accessible space, each accessible portion of the space shall be served by not less than two (2) accessible means of egress. Each accessible means of egress shall provide a continuous path of travel from a required accessible space to a public way which is usable by a mobility impaired person and shall include accessible routes, ramps, exit stairways, elevators, horizontal exits or smoke barriers.

Section 1009.6.4 is added to the IBC to read as follows:—

~~**1009.6.4 Stair Construction Method.** All stairs serving as a means of egress shall be constructed as a self-supporting structure independent of the floors of the building to which it serves. Connections to the floors shall be with breakaway connectors capable of detaching when the floors collapse.~~

Section 1020.2.3 of the IBC is added to read as follows:

1020.2.3 Construction of Path to Egress Discharge. Egress discharge paths shall be made of permanent, formed materials arranged in a manner to lead occupants to a public way. Grass lawns, gravel and other filler materials will not be an acceptable path base.

Section 1027.7 is added to the IBC to read as follows:

1027.7 Construction of Path to Egress Discharge. Egress discharge paths shall be made of permanent, formed materials arranged in a manner to lead occupants to a public way. Grass lawns, gravel and other filler materials will not be an acceptable path base.

Section 1209.2.1 of the IBC is added to read as follows:

1209.2.1 Dedicated Attic Walkways. When a commercial or multi-family residential structure is provided with an attic, dedicated and permanent walkways shall be installed to provide an easy manner for maintenance personnel to transverse the structural spans. The walkway shall be of materials consistent with the construction of the building. The walkway shall be a maximum of 18 inches wide or meeting required widths as designated by other Codes and shall not be used for storage. ~~The walkway shall be a minimum of 18 inches wide but not wide enough to permit storage.~~ The walkway shall be arranged so to prevent any contact with sprinkler piping or the insulation that protects the piping.

Sections 1507.1.1 and 1507.1.2 are added to the IBC to read as follows:

1507.1.1 Cool roof requirements. Roof coverings for roof slopes less than two units vertical in 12 units horizontal (less than 17-percent slope) for buildings and covered parking shall conform to Sections 1507.1.1 and 1507.1.2. Replacement, including any change to design or materials, of the roof of a building or structure in a Historic District Zone must be approved by the Historic District Commission. A minimum of 75% of the entire roof surface not used for roof penetrations, onsite renewable energy systems, or vegetated roofing systems shall be covered with products that comply with the following:

1. Have a minimum initial solar reflective index (SRI) of 78, as described in Section 1507.1.2; or
2. Comply with the criteria for the U.S. EPA's Energy Star Program Requirements for Roof Products – Eligibility Criteria.

Exceptions:

1. Roofs used to shade or cover parking and roofs over semi-heated spaces or used as outdoor recreation space by the occupants of the building shall be permitted to be either landscaped or have a minimum initial *SRI* of 29. A default *SRI* value of 35 for new concrete without added color pigment is allowed to be used in lieu of measurements.
2. Terraces on setbacks comprising less than 25% of the area of the largest floor plate in the building.

3. Roofs ballasted at a minimum weight of 17 pounds per square foot with limestone or a ballast with a solar reflectance of at least 30% shall be permitted to comprise part or all of the 75% required area coverage.
4. Roofs where a minimum of 75% of the roof area is shaded during the peak sun angle on June 21st by permanent features of the building.
5. Vegetated roofs and onsite renewable energy systems shall be permitted to comprise part or all of the 75 percent required area coverage.

1507.1.2 Solar Reflective Index. The solar reflective index (SRI) shall be calculated in accordance with ASTM E1980 for medium-speed wind conditions. The SRI shall be based upon solar reflectance as measured in accordance with ASTM E1918 or ASTM C1549, and the thermal emittance as measured in accordance with ASTM E408 or ASTM C1371. For roofing products, the values of a solar reflectance and thermal emittance shall be determined by a laboratory accredited by a nationally recognized accreditation organization, such as the Cool Roof Rating Council CRRC-1 Product Rating Program, and shall be labeled and certified by the manufacturer.

Section 3111 is added to the IBC to read as follows:

Section 3111

Radio Amplification System for Emergency Service Personnel

3111.1 General. The provisions of this Section shall apply to all newly constructed below ground floors of a building, all floors in buildings greater than 25000 ft² per floor, and to all floors of buildings greater than 3 stories in height, ~~of Type I and II constructions.~~

~~**Exception:** The requirements of this section shall not apply to areas within an individual dwelling unit.~~

3111.2 Where Required. Every floor area in a building or structures which can not achieve the required level of radio coverage as established by Montgomery County Department of Technology Services (DTS) shall be provided with in-building public safety radio enhancement system in accordance with the Montgomery County Fire Safety Code.~~signal amplification system.~~

3111.3 Inspection and Testing. ~~Radio~~ Emergency responder radio coverage and in-building ~~signal amplification~~ public safety radio enhancement systems must be tested, and inspected by approved individuals. The results of the testing and inspection shall be certified to the code official and Montgomery County prior to issuance of an occupancy permit.

Chapter 34 of the IBC is amended to read as follows:

CHAPTER 34
EXISTING STRUCTURES

Section 3401

General

3401.1 Scope. Existing structures or buildings shall comply with the *Maryland Building Rehabilitation Code (COMAR 05.16.01)* as described in Article XIII of this Chapter.

Appendix I Patio Covers of the IBC is adopted in its entirety.

Sec. 5-88. Adoption of Maryland Accessibility Code.

The *Maryland Accessibility Code (COMAR 05.02.02.)* is adopted by reference.

Secs. 5-89 – 5-95. Reserved.